

(No Model.)

E. CATTLOW.
ART OF MANUFACTURING CHENILLE.

No. 520,400.

Patented May 22, 1894.

Fig. 1.

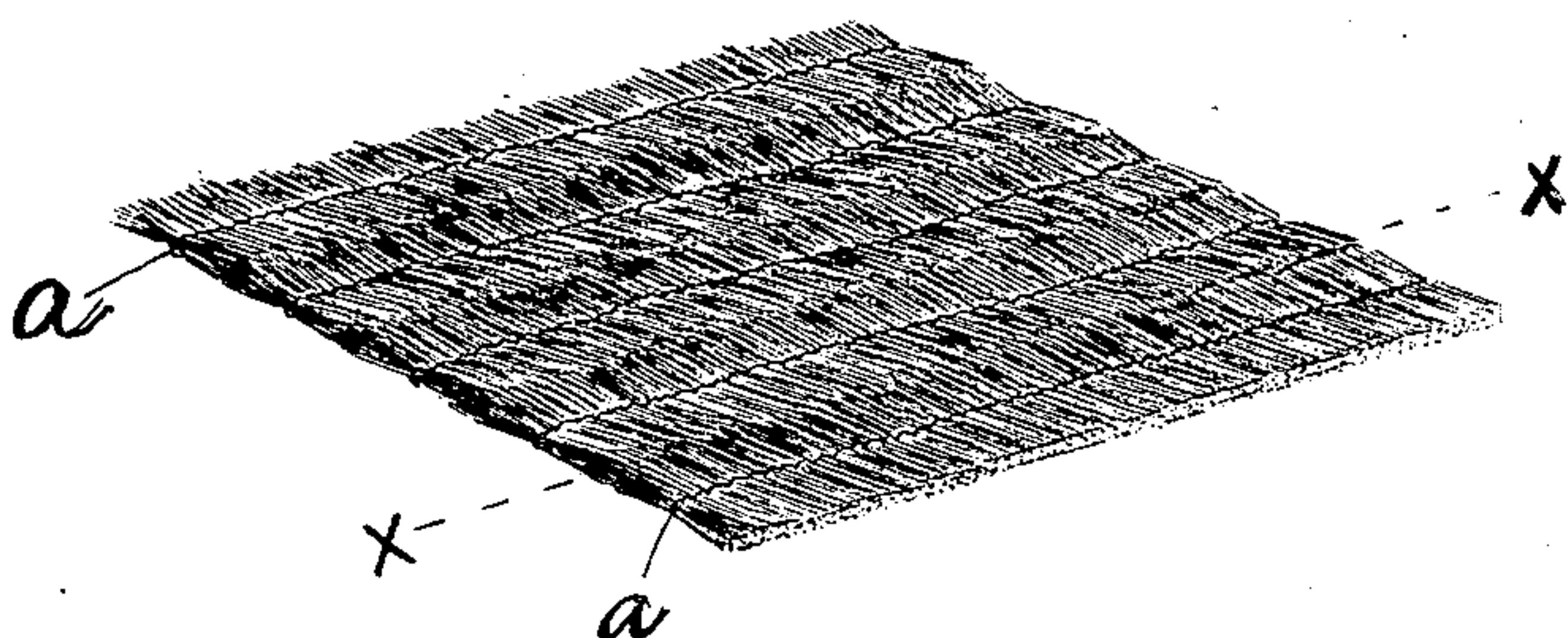


Fig. 2.



Fig. 3.



Witnesses:

*Philipp Diekel
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Inventor:

Edward Cattlow

UNITED STATES PATENT OFFICE.

EDWARD CATTLOW, OF PHILADELPHIA, PENNSYLVANIA.

ART OF MANUFACTURING CHENILLE.

SPECIFICATION forming part of Letters Patent No. 520,400, dated May 22, 1894.

Application filed February 16, 1891. Serial No. 381,730. (No specimens.)

To all whom it may concern:

Be it known that I, EDWARD CATTLOW, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful improvements in the art of manufacturing chenille, whereby all kinds of animal and vegetable fibers may be made into weft for weaving at greatly-reduced cost with increased production; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to make chenille-weft direct from unspun animal and vegetable fibers or a mixture of the same and from waste yarns, &c., at about the same cost or less than spinning the same weight of yarn and also to produce a weft from common fibers that will admit of being used in the manufacture of high grade goods giving them a plush-like finish, and to this end my invention consists in carding into a lap a mass of fibers or yarns (or a mixture of both) and sewing stitches through them, then cutting the said mass of fibers into strips, thus producing a weft the fibers of which will stand out from the stitches forming the core thereof. When it is desired to produce round chenille threads, "the strips are twisted causing the fibers to stand out radially" from the core threads.

In the accompanying drawings, Figure 1 shows a perspective view of a carded lap of unspun fibers produced in accordance with the invention; the rows of stitches being indicated at (a) and the line of separation at $x x$. Fig. 2 shows one of the separated strips of chenille, and Fig. 3 shows one of the twisted chenille strips ready for use in weaving in this form.

To carry my invention into effect I make use of a sewing-machine made suitable for the purpose, which can be done by removing all the working parts of a warp knitting machine except the needle-bar and thread guide and take-up motion, and substituting a pointed catch needle for the one commonly

used, these changes together with an apron feed such as is used on carding machinery, converts the knitting machine into a sewing machine suitable for the purpose, though a sewing machine suitable for the purpose may be constructed specially for the purpose with or without the catch needle.

My method of preparing fibers, such as hair, wool shoddy and such other fibers as can be carded, is, to proceed the same as in carding for yarns, feeding the material on the cards and removing the lap and transferring it either by hand or the transfer feed to the apron of the sewing-machine, if (by hand) reverse the lap and feed crosswise at right angle to the needles, when it receives the stitches as shown in the accompanying drawings. The cutting can be done on the sewing machine at one operation, or the weft-cloth may be wound on beams and cut in the usual way; the chenille may be as fine as eight cuts to the inch, this being about the limit of cutting.

To make the operation continuous use the transfer feed to convey the carded lap from the cards to the sewing machine apron (one card will usually be sufficient) yarns may be mixed with the fibers in any quantity desired.

In making chenille from rags or waste yarn, my method is to reduce the material to a coarse lint, preserving the form of the yarn threads as much as possible, the material to be carded into a lap, the same as other unspun fibers, thereby producing a chenille, similar to that produced from yarn threads.

In using ramie-fibers I proceed as in carding shoddy stock, thereby simplifying the manufacturing of this important fiber and greatly reducing the cost.

In using hemp, ramie, &c., machinery suitable for these fibers may be substituted for the cards, and in using any coarse fibers such as cocoa, sisal-grass, &c., to be used in making mats and like fabrics and waste yarns for coarse and heavy work, no other preparation is necessary other than cutting or breaking the stuff before feeding on the sewing-machine apron.

Having fully described my invention, what

I claim, and desire to obtain by Letters Patent, is—

5 The hereinbefore described process of manufacturing chenille-weft for weaving, which consists in carding into a lap a mass of unspun fibers so as to lay the fibers thereof parallel, sewing rows of stitches into the same at right angles to the length of said fibers, cut-

ting between the said rows of stitches the said lap into strips to cause the projecting 10 fibers thereof to stand out radially from the stitches forming the core thereof.

EDWARD CATTLOW.

Witnesses:

WM. H. LAMON,
GEORGE W. RICHERS.

Corrections in Letters Patent No. 520,400.

It is hereby certified that in Letters Patent No. 520,400, granted May 22, 1894, upon the application of Edward Cattlow, of Philadelphia, Pennsylvania, for an improvement in the "Art of Manufacturing Chenille," errors appear in the printed specification requiring the following correction, viz: In lines 49 and 56, page 1, the words "catch" preceding the words "needle" should read *latch*; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 29th day of May, A. D. 1894.

[SEAL.]

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.